

**PROTOCOL OF INTENT**

**BETWEEN**

**THE UNITED STATES DEPARTMENT OF ENERGY**

**AND**

**THE STATE OF CEARA, FEDERATIVE REPUBLIC OF BRAZIL**

**TO COOPERATE IN THE  
ESTABLISHMENT OF A SOLAR  
ENERGY BASED RURAL ELECTRIFICATION PROGRAM**

WHEREAS, The United States Department of Energy (DOE) and the State of Ceara, Federative Republic of Brazil, ("the Participants"), have a mutual interest in the use of solar energy based electrification technologies in rural areas of the Federative Republic of Brazil;

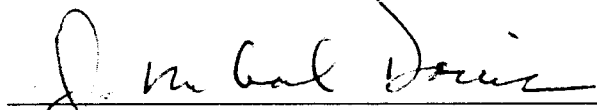
WHEREAS, The Participants believe that energy security can be enhanced through recognition of the contribution of solar energy based technologies to fuel diversity, and believe that mutual cooperation would also promote increased economic interaction, facilitate technology transfer, accelerate commercialization of solar energy based systems and products, and expand opportunities for international trade; and

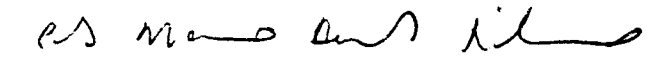
WHEREAS, a program of cooperation in the deployment and use of solar energy based technologies would be of mutual benefit to the Participants:

1. The Participants hereby intend to establish a basis for mutual cooperation to facilitate joint activities related to solar energy based technologies. Activities under the program to be established by the Participants may include, but will not be limited to, the following:
  - (a) Purchase, shipment, installation, operation, maintenance and repair of solar electricity systems and approximately 1,000 residential lighting systems in the Jericoacoara Model Village and elsewhere in the State of Ceara;
  - (b) Training of personnel relating to installation, operations, and maintenance of such systems and equipment;
  - (c) Exchange of technical and economic information and data;
  - (d) Joint technical evaluation of the program.
  - (e) Analysis of the feasibility of monitoring the operation and performance of solar electricity and residential lighting systems and equipment used in the Program, and maintaining and evaluating data pertaining to such operation and performance.

2. The Participants intend that the Program will commence upon the completion of an agreement by the Participants which may provide, inter alia, for the following:
- (a) Establishment of a body to manage the program;
  - (b) Designation of the National Renewable Energy Laboratory, or any other designee to carry out activities including monitoring systems and equipment performance and evaluating data pertaining to such performance;
  - (c) Designation of Companhia Energetica do Ceara or any other designee, to carry out activities including provision and installation of solar electricity and residential lighting systems and equipment, and training of personnel related to installation, operations, and maintenance of such systems and equipment;
  - (d) Adequate and effective protection of intellectual property rights and rights in technical data; and
  - (e) Financial arrangements.

DONE at Washington, DC, this 29th day of June, 1992.

  
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**FOR THE**  
**U.S. DEPARTMENT OF ENERGY**

  
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**FOR THE STATE OF CEARA,**  
**FEDERATIVE REPUBLIC OF BRAZIL**